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09/963,815	09/26/2001	Robert P. Benjey	01-ASD-109 (GT)	1163
200	7590 05/27/2004		EXAMINER	
EATON CORPORATION			RIVELL, JOHN A	
EATON CENTER 1111 SUPERIOR AVENUE			ART UNIT	PAPER NUMBER
	D, OH 44114		3753	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 05262004

Application Number: 09/963,815 Filing Date: September 26, 2001 Appellant(s): BENJEY, ROBERT P.

> Roger A. Johnston For Appellant

MAILED MAY 2 7 2004 GROUP 3700

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed March 11, 2004.

(1) Real Party in Interest

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A statement identifying the real party in interest is contained in the brief.

### (2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

#### (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

#### (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is correct.

## (7) Grouping of Claims

The rejection of claims 1-11 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

## (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (9) Prior Art of Record

5,282,497 ALLISON 2-1994

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The Prior Art of instant figure 5 as disclosed on page 3, line 26 through page 4, line 17 [paras. 0012-0013]

#### (10) Grounds of Rejection

Claims 1-11 are rejected under 35 U.S.C. §103(a) as being unpatentable over the prior art disclosed in instant figure 5 of the application in view of Allison. This rejection is set forth in prior Office Action, Paper No. 6, mailed July 16, 2003.

#### (11) Response to Argument

Appellants' argument is that the combination of references proposed in the Final rejection is not supportable as obvious by reason that Allison does not teach a liquid seal in the upper tube about the nozzle. In support of this allegation applicant argues that:

"The drawings of the patent clearly show that the filler nozzle (shown in dashed outline) is clearly of insufficient proportion ("diameter") to the filler tube upper region which is not reduced in size as to cause any aspirating effect. If the Allison patent taught a liquid seal in the upper filler tube end about the nozzle, then the result would be aspiration. However, Allison does not teach this."

In figures 4 and 5 of Allison the filler nozzle, shown in dashed lines, clearly is of insufficient diameter to positively "seal" against the flow of fluid within the hole 88 of plate 87, through which the filler nozzle passes.

However, as set forth in the Final rejection, this is not the embodiment relied on to demonstrate that it is known in the prior art to employ a liquid seal element about the filler nozzle when the filler nozzle is located inside of a filler neck during refueling operations of a vehicle.

As shown in fig. 8 of Allison, and as disclosed at column 8, line 27 through column 9, line 9, more specifically at column 8, lines 48-52 "an elastomeric nozzle seal

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212... is adapted to resiliently and sealingly engage the exterior periphery of nozzle "N" upon insertion therethrough prior to engagement with splash door 82."

In order to support the Examiners contention of "aspiration" of fuel vapor from the fuel tank, via vapor connection 99 between the filler neck and the top of the fuel tank, occurring as a result of inflow of fuel through the nozzle the Examiner further points out that Allison further discloses at column 8, lines 52-60 that "once nozzle 'N' is inserted through nozzle opening 88, the rushing liquid fuel dispensed therefrom creates a vacuum behind nozzle seal 212 in chamber 89.

Clearly the "seal" 212 precludes the straight venting of potentially harmful fuel vapor directly to the atmosphere.

The further argument that "the Examiners proposal... fails to provide any suggestion of or basis for the proposed combination" is unpersuasive.

As set forth in the Final rejection, the Examiner concluded that it would have been obvious to add a nozzle seal about the filler nozzle in the device of application fig. 5 for the purpose of precluding straight venting of fuel vapor directly to the atmosphere as suggested by Allison.

As shown in application Fig. 5, the lower end of the filler nozzle comes into close proximity with the inner diameter of the smaller diameter section of the filler neck thus forming, at this location the claimed "liquid seal". Lacking from the prior art of fig. 5 is a mechanical seal about the upper end of the filler nozzle within fill cup 5a. Absent such a mechanical seal, while the "liquid seal" does permit aspiration of the fuel vapor from conduit 13a, inadvertent migration of fuel vapor directly to the atmosphere is more than likely to occur.

The patent to Allison, by teaching the employment of a mechanical nozzle seal 212 about the filler nozzle, clearly suggests to one of ordinary skill the desirability of

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preventing the direct venting of fuel vapor to the atmosphere while at the same time permitting fuel vapor recirculation.

The Examiners proposal is thus believed to be supported by the teachings of the prior art.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted

Primary Examiner
Art Unit 3753

j.r. May 26, 2004

Conferees

Stephen Hepperle

Dave-Scherbel

Attachments: Initialed PTO-1449 filed September 25, 2003

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